

What is claimed is:

1. Method for processing a received television signal comprising one of a first type of television signal and a second type of television signal, the method 5 comprising:

amplifying said received television signal in response to a control signal, where said amplifying occurs when said received television signal exceeds a first signal level if said received television signal comprises the first type of television signal, said amplifying occurs when said received television signal exceeds a 10 second signal level if received television signal comprises the second type of television signal, and said second signal level is greater than said first signal level.

2. The method of claim 1 wherein the first type of television signal comprises 15 a digital television signal and the second type of television signal comprises an analog television signal.

3. The method of claim 2 wherein said digital television signal comprises a high definition television (HDTV) signal and said analog television signal 20 comprises a National Television Standard Committee (NTSC) television signal.

4. The method of claim 1 further comprising:

25 sending said received television signal downstream for further processing upon amplifying said received television signal.

5. The method of claim 1 further comprising:

amplifying said received television signal up to the first signal level and 30 prior to said amplifying in response to said control signal if said received television signal comprises the first type of television signal television signal, where said amplifying up to the first signal is performed at a higher amplification level than said amplifying in response to said control signal.

6. The method of claim 1 further comprising:

amplifying said received television signal up to the second signal level and prior to said amplifying in response to said control signal if said received television signal comprises said second type of television signal, where said

5 amplifying up to the first signal level is performed at a higher amplification level than said amplifying in response to said control signal.

7. The method of claim 1 wherein said first signal level represents an automatic gain control (AGC) delay point of the first type of television signal and 10 said second signal level represents the AGC delay point of the second type of television signal.

8. The method of claim 7 wherein the AGC delay point of the first type of television signal is less than the AGC delay point of the second type of television 15 signal.

9. The method of claim 1 wherein said amplifying comprises:

decreasing a value of said control signal when said received television signal exceeds a first signal level if the received television signal comprises the 20 first type of television signal, where the amplifying occurs in response to the decreased value of said control signal.

10. The method of claim 1 wherein said amplifying comprises:

decreasing a value of said control signal when said received television 25 signal exceeds a second signal level if the received television signal comprises the second type of television signal, where the amplifying occurs in response to the decreased value of said control signal.

11. The method of claim 1 wherein said amplifying comprises:

30 decreasing a gain of a radio frequency (RF) tuner processing said received television signal.

12. The method of claim 11 wherein the gain of the RF tuner is dynamically reduced based on an estimated signal level of said received television signal.

13. The method of claim 12 further comprising:

5 measuring a value of said control signal from said first signal level and a gain curve of the RF tuner; and

determining said estimated signal level from the value of said control signal.

10 14. The method of claim 1 wherein said control signal comprises an AGC signal provided from an intermediate frequency (IF) AGC circuit.

15 15. The method of claim 1 wherein said amplifying occurs to maintain the signal level of said amplified television signal at the first signal level if said received television signal comprises the first type of television signal, and said amplifying occurs to maintain the signal level of said amplified television signal at the second signal level if said received television signal comprises the second type of television signal.

20 16. An apparatus for processing a received television signal comprising one of a first type of television signal and a second type of television signal, the apparatus comprising:

25 a radio frequency (RF) tuner for receiving said received television signal and amplifying said received television signal in response to a decreased value of a control signal; and

an automatic gain control (AGC) circuit, coupled to said RF tuner, for adjusting said control signal to said RF tuner, where the value of said control signal is decreased when said received television signal exceeds a first signal level if said received television signal comprises the first type of television signal, the value of said control signal is decreased when said received television signal exceeds a second signal level if received television signal comprises the second

type of television signal, and said second signal level is greater than said first signal level.

17. The apparatus of claim 16 wherein the first type of television signal

5 comprises a digital television signal and the second type of television signal comprises an analog television signal.

18. The apparatus of claim 16 further comprising:

an intermediate frequency (IF) tuner, coupled to said RF tuner and said

10 AGC circuit, for receiving an IF television signal from said RF tuner, converting said IF television signal into a baseband television signal, and providing said baseband television signal to said AGC circuit and downstream for further video processing.

15 19. The apparatus of claim 16 wherein said RF tuner comprises:

a RF amplifier for amplifying said received television signal in response to a decreased value of a control signal.

20. The apparatus of claim 16 wherein said AGC circuit comprises:

20 a digital IF circuit for decreasing the value of said control signal when said received television signal exceeds a first signal level if said received television signal comprises the first type of television signal; and

25 an analog IF circuit for decreasing the value of said control signal when said received television signal exceeds a second signal level if received television signal comprises the second type of television signal.

21. The apparatus of claim 16 wherein said first signal level represents an automatic gain control (AGC) delay point of the first type of television signal and said second signal level represents the AGC delay point of the second type of television signal.

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22. The apparatus of claim 21 wherein the AGC delay point of the first type of television signal is less than the AGC delay point of the second type of television signal.